9/05/2/22

TRANSMITTAL OF FORMAL DRAWINGS

Docket No.
HITACHI-0016

OIPE JC48 JUL 16 2004 PATENT & TRADEMARK OFFICE

In Re Application Of: **YAMASHITA**

Application No.	Filing Date	Confirmation No.	Examiner	Customer No.	Group Art Unit
09/944,950	November 27, 2001	1777	HWANG, Joon H.	21,302	2122

Invention: **METHOD AND SYSTEM FOR MULTIDIMENTIONAL DATABASE MANAGEMENT**

Address to:
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Transmitted herewith are:

22 sheets of formal drawing(s) for this application.

☒ Each sheet of drawing indicates the identifying indicia suggested in 37 CFR Section 1.84(c).

Signature

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Dated: **July 13, 2004**

I certify that this document and attached formal drawings are being deposited on 7/13/04 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature of Person Mailing Correspondence

Iris C. Rousey

Typed or Printed Name of Person Mailing Correspondence

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FIG.1

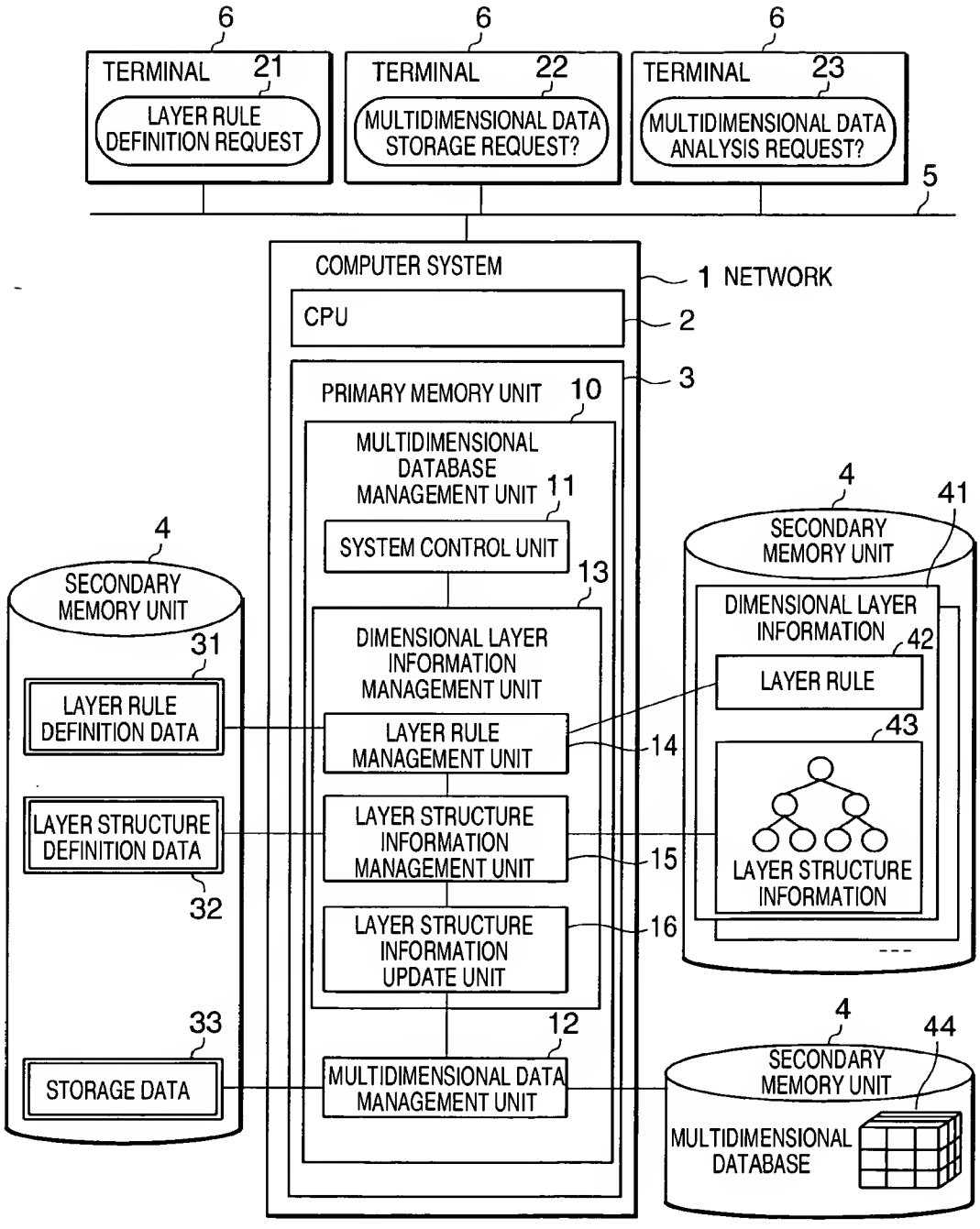

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FIG.2

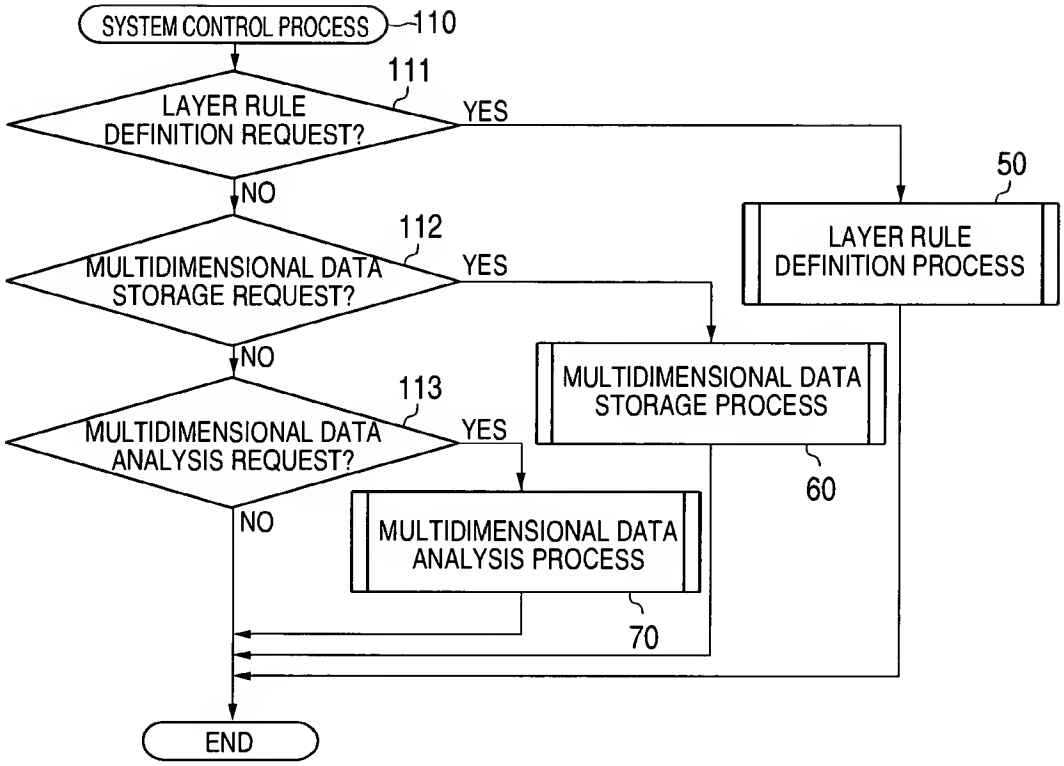

FIG.3

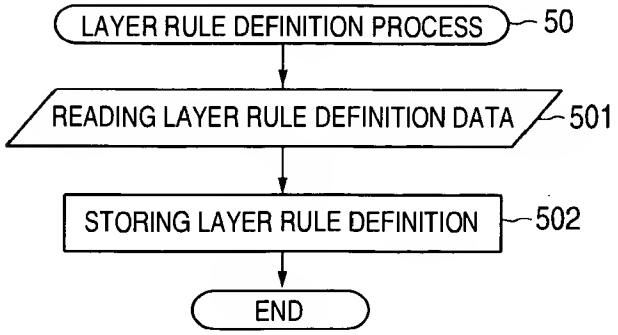

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FIG.4

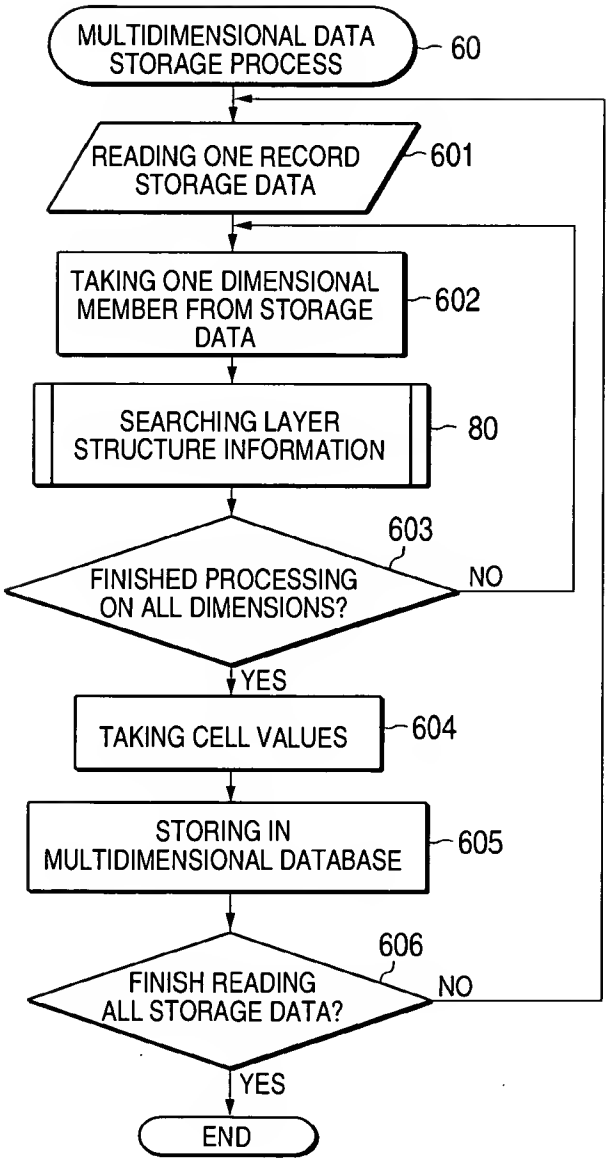

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FIG.5

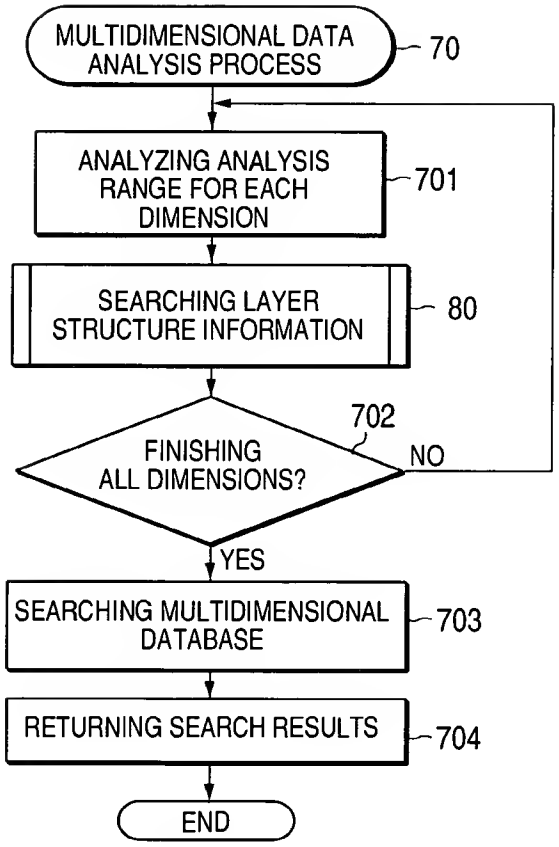

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FIG.6

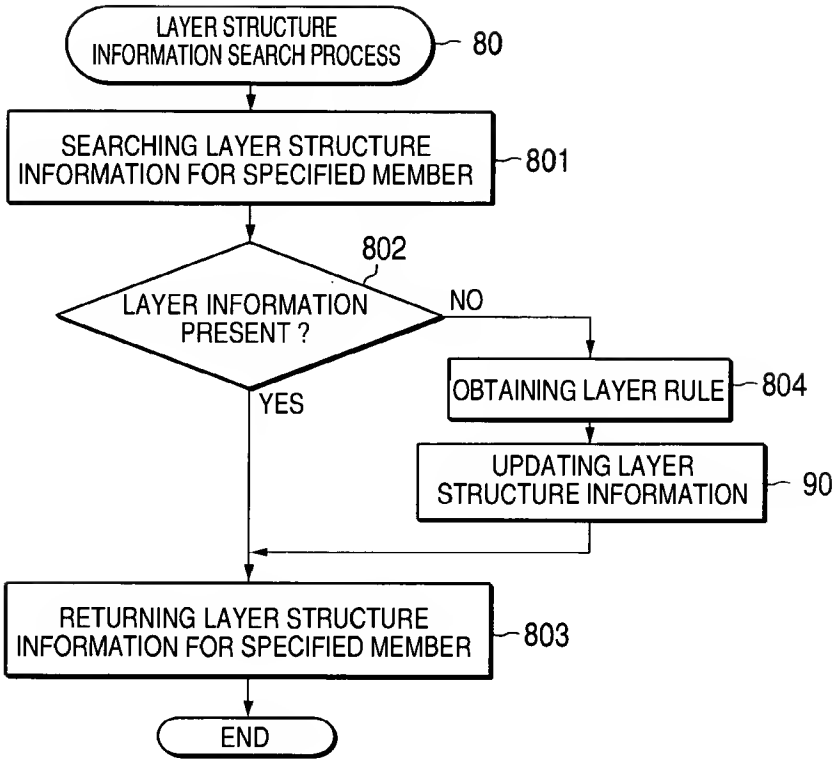

FIG.7

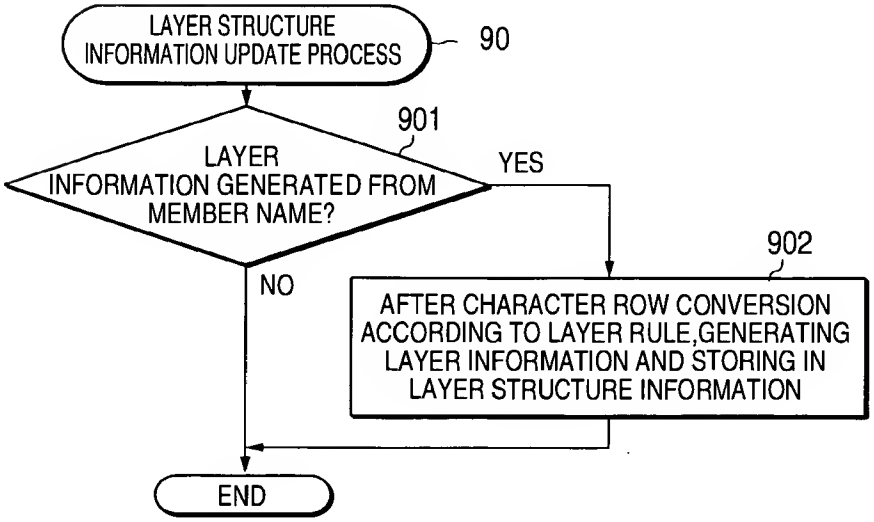

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FIG.8

3110

TIME DIMENSIONAL LAYER RULE DEFINITION DATA

```
#LAYER RULE :
#AFTER CHARACTER ROW CONVERSION ON MEMBER, OBTAINING LAYER INFORMATION

FROM MEMBER NAME
LEVEL10= $ MEMBER NAME
LEVEL11={
   S/￥(.... ＼)0[123]/＼1Q1/
   S/￥(.... ＼)0[456]/＼1Q2/
   S/￥(.... ＼)0[789]/＼1Q3/
   S/￥(.... ＼)1[012]/＼1Q4/
]
LEVEL12={
   S/  (.... ＼)../＼1/
]
```

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FIG.9

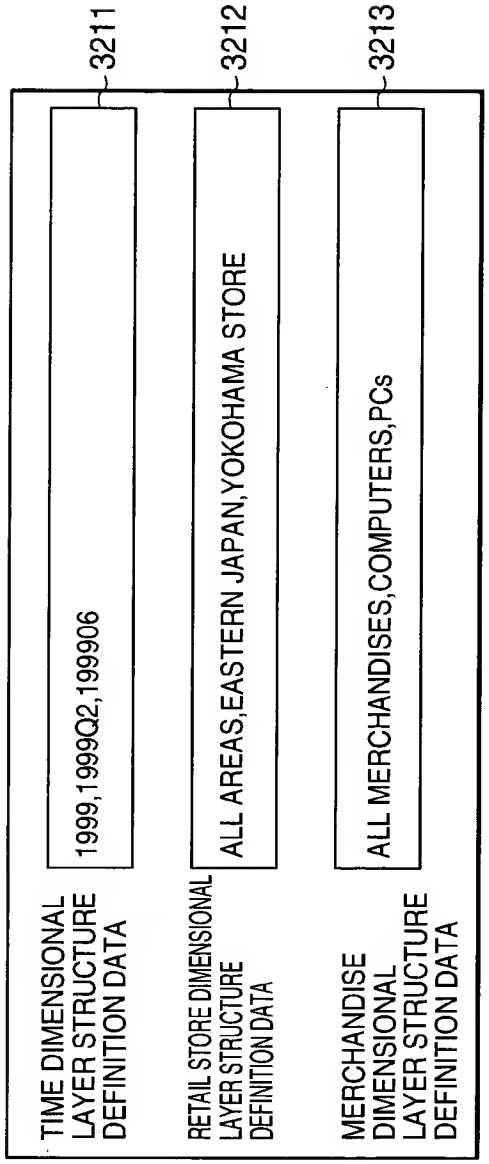

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FIG.10

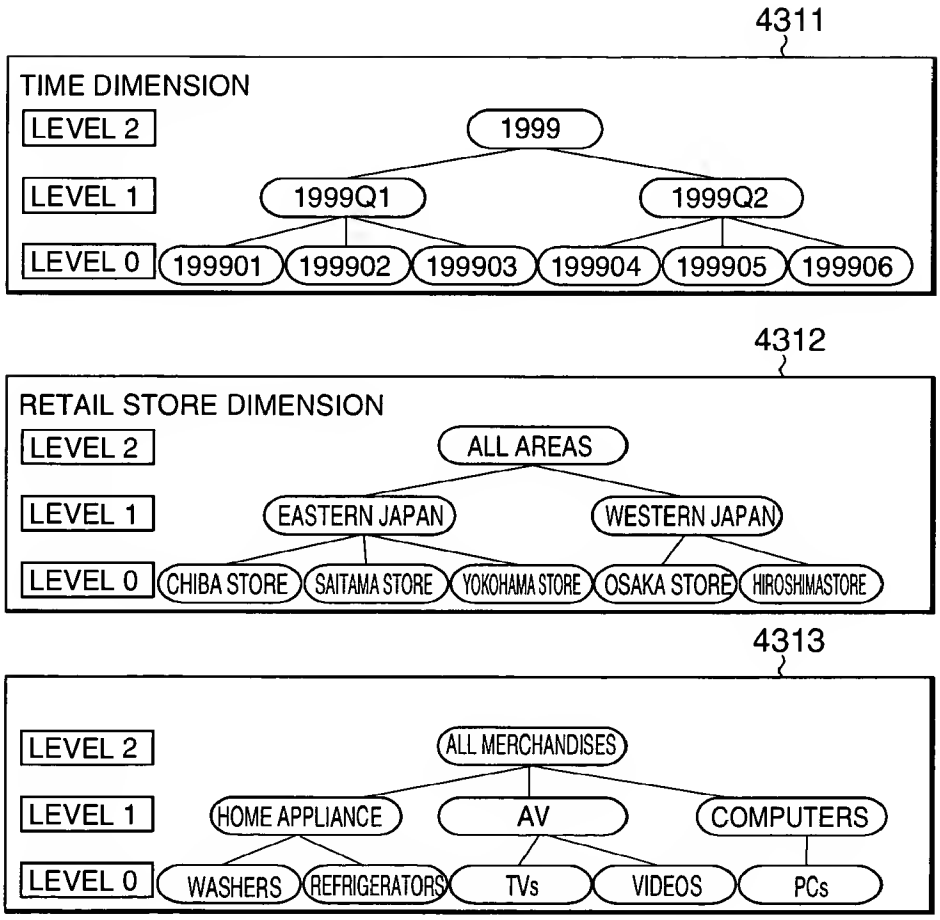

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FIG.11

3120

RETAIL STORE DIMENSIONAL LAYER RULE DEFINITION DATA

```
#LAYER RULE :
#OBTAINING LAYER INFORMATION FROM CSV FORMATTED FILE

FROM FILE,CSV FILE1
LEVEL0=COLUMN 3
LEVEL1=COLUMN 2
LEVEL2=COLUMN 1
```

FIG.12

3126

```
ALL AREAS,EASTERN JAPAN,CHIBA STORE
ALL AREAS,EASTERN JAPAN,SAITAMA STORE
ALL AREAS,EASTERN JAPAN,YOKOHAMA STORE
ALL AREAS,WESTERN JAPAN,OSAKA STORE
ALL AREAS,WESTERN JAPAN,HIROSHIMA STORE
```

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FIG.13

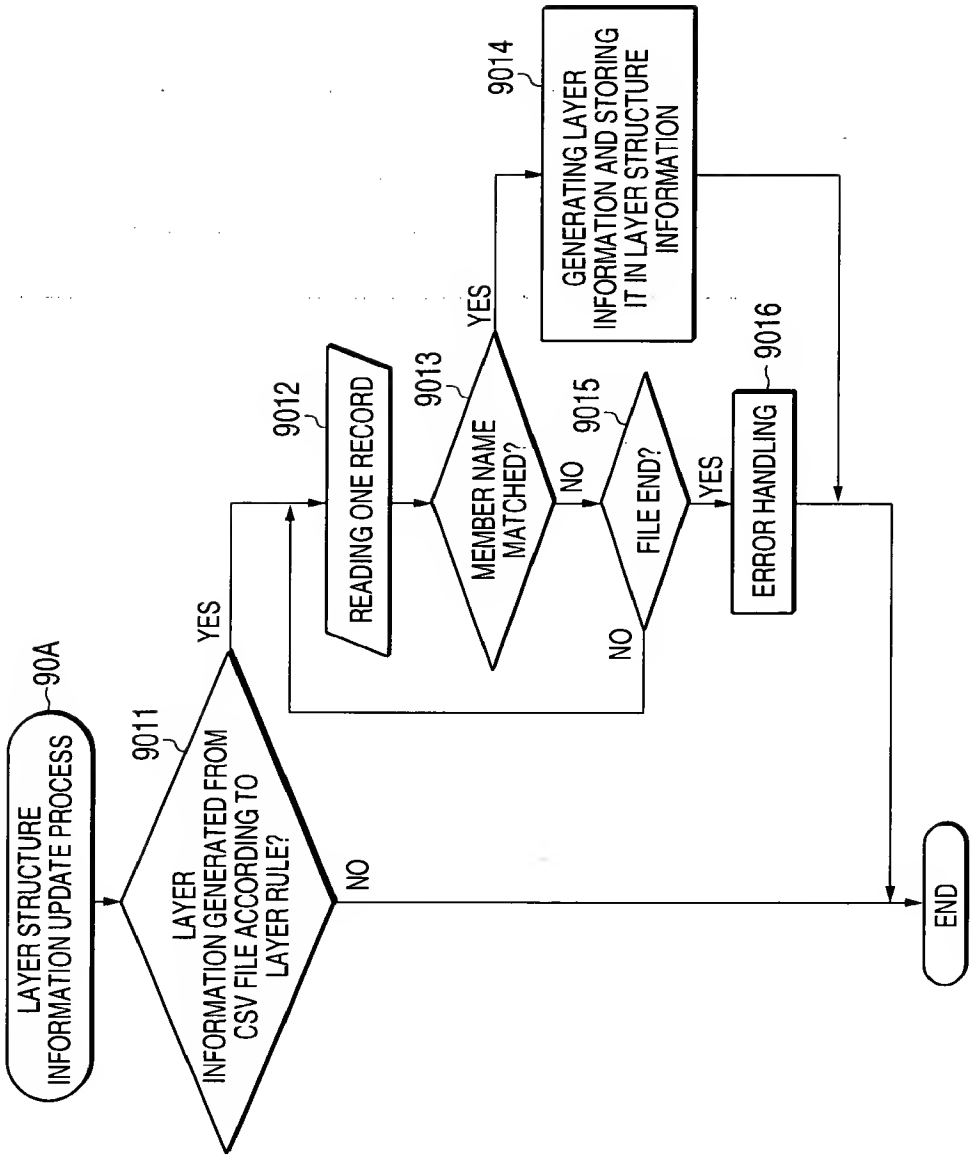

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FIG.14

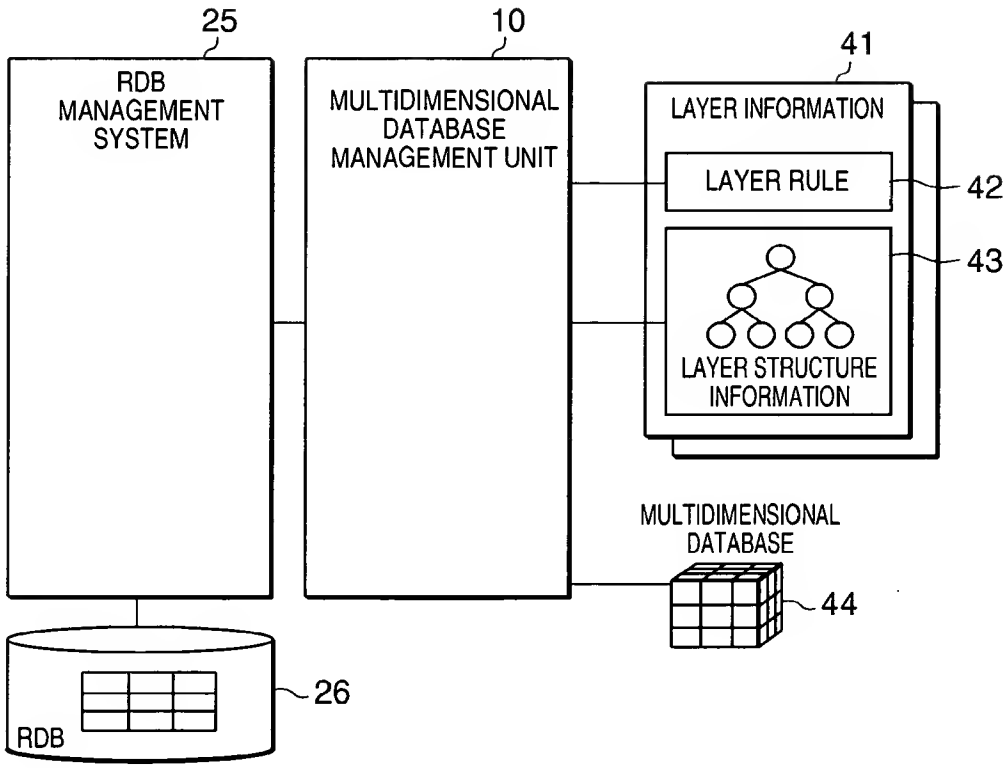

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FIG.15

3130

MERCHANDISE DIMENSIONAL LAYER RULE DEFINITION DATA

```
#LAYER RULE : RDB TABLE 'PRODUCT MASTER TABLE'
#OBTAINING FROM COL1,COL2
FROM RDB TABLE 'PRODUCT MASTER TABLE'
LEVEL 0=SMALL CLASSIFICATION
LEVEL 1=LARGE CLASSIFICATION
LEVEL 2="ALL MERCHANDISE"
```

FIG.16

CONTENT OF RDB PRODUCT MASTER TABLE

LARGE CLASSIFICATION	SMALL CLASSIFICATION
HOME APPLIANCE	WASHERS
HOME APPLIANCE	REFRIGERATORS
AV	TVs
AV	VIDEOS
COMPUTERS	PCs

261

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FIG.17

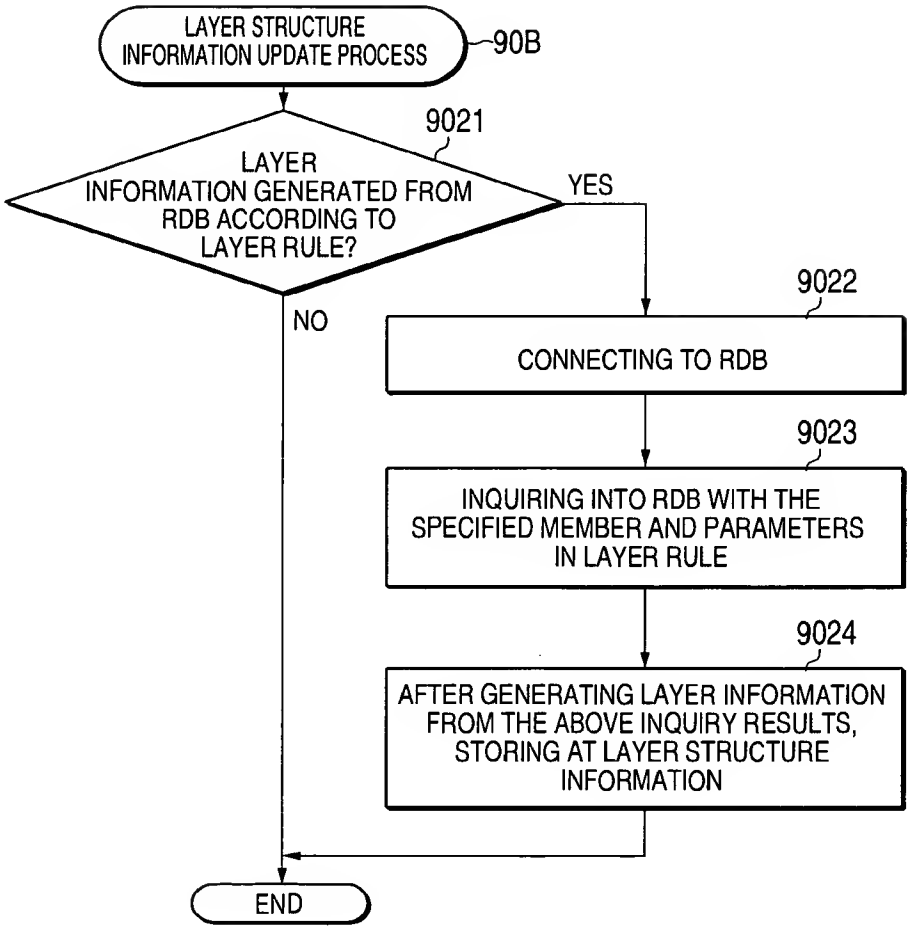

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FIG.18

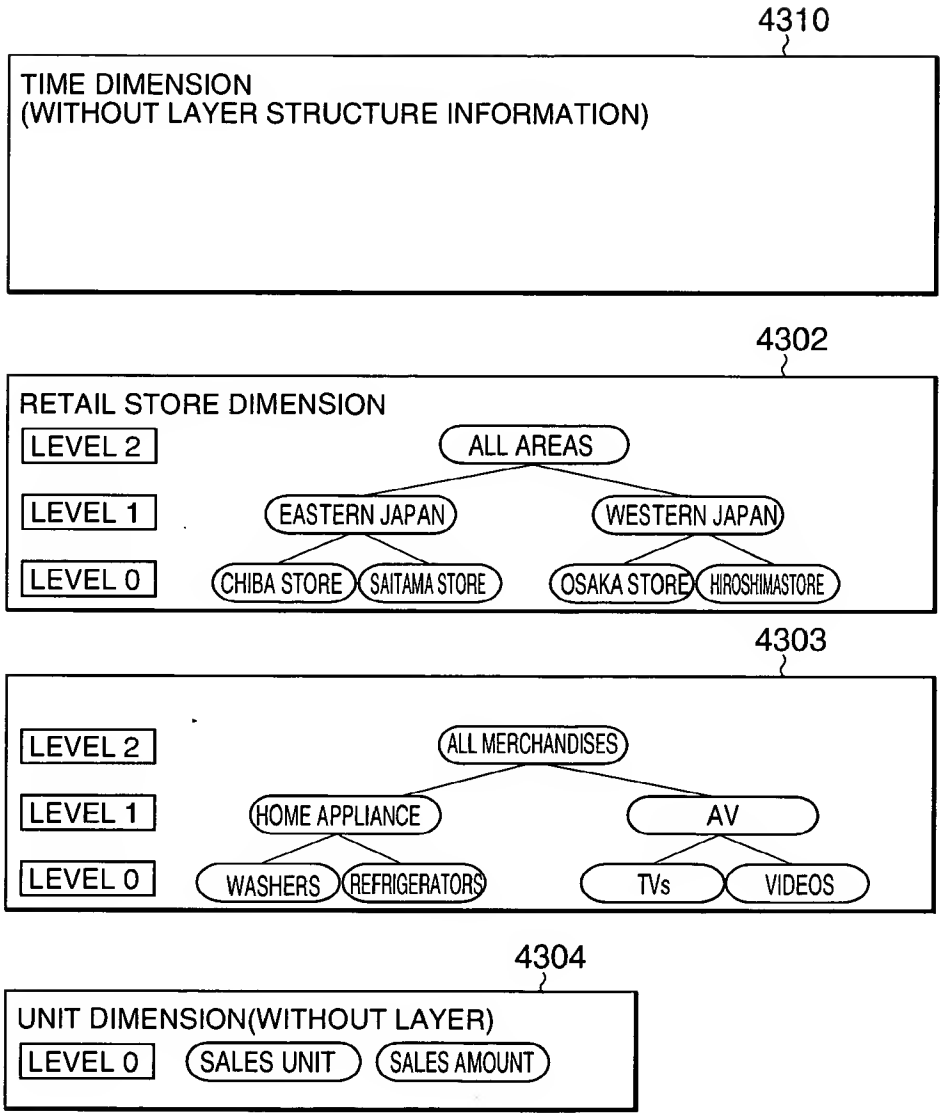

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FIG.19

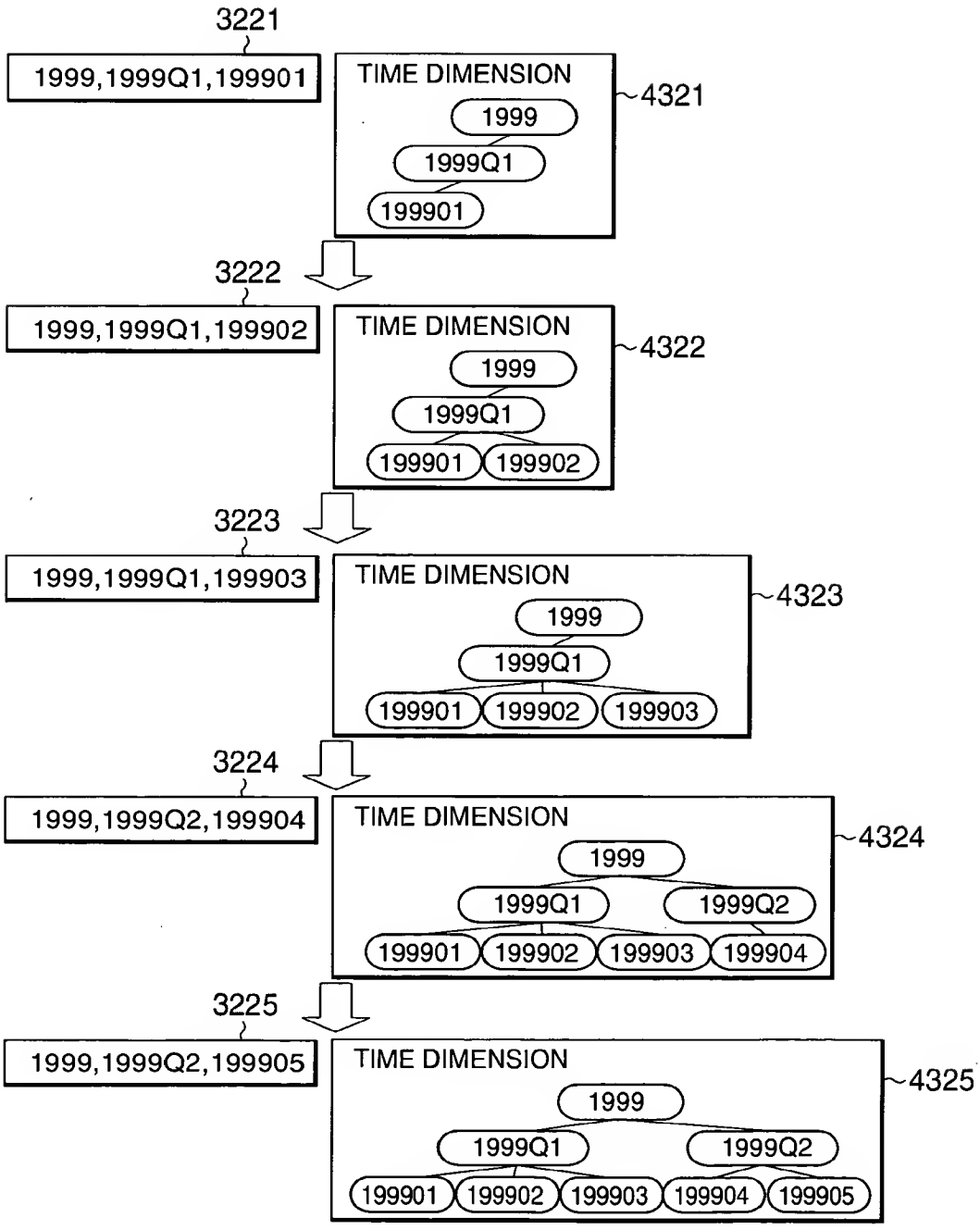

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FIG.20 PRIOR ART

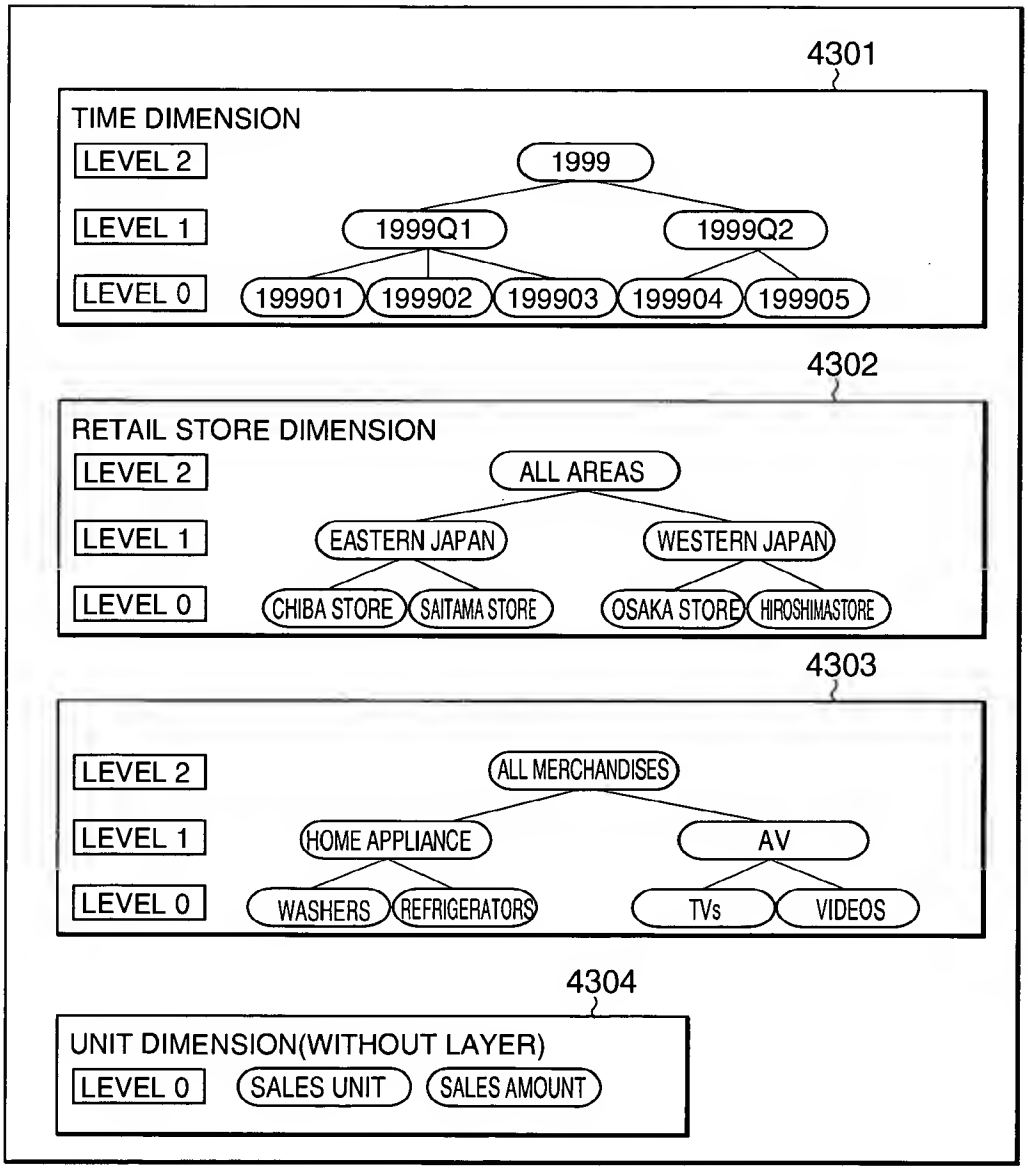

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FIG.21 PRIOR ART

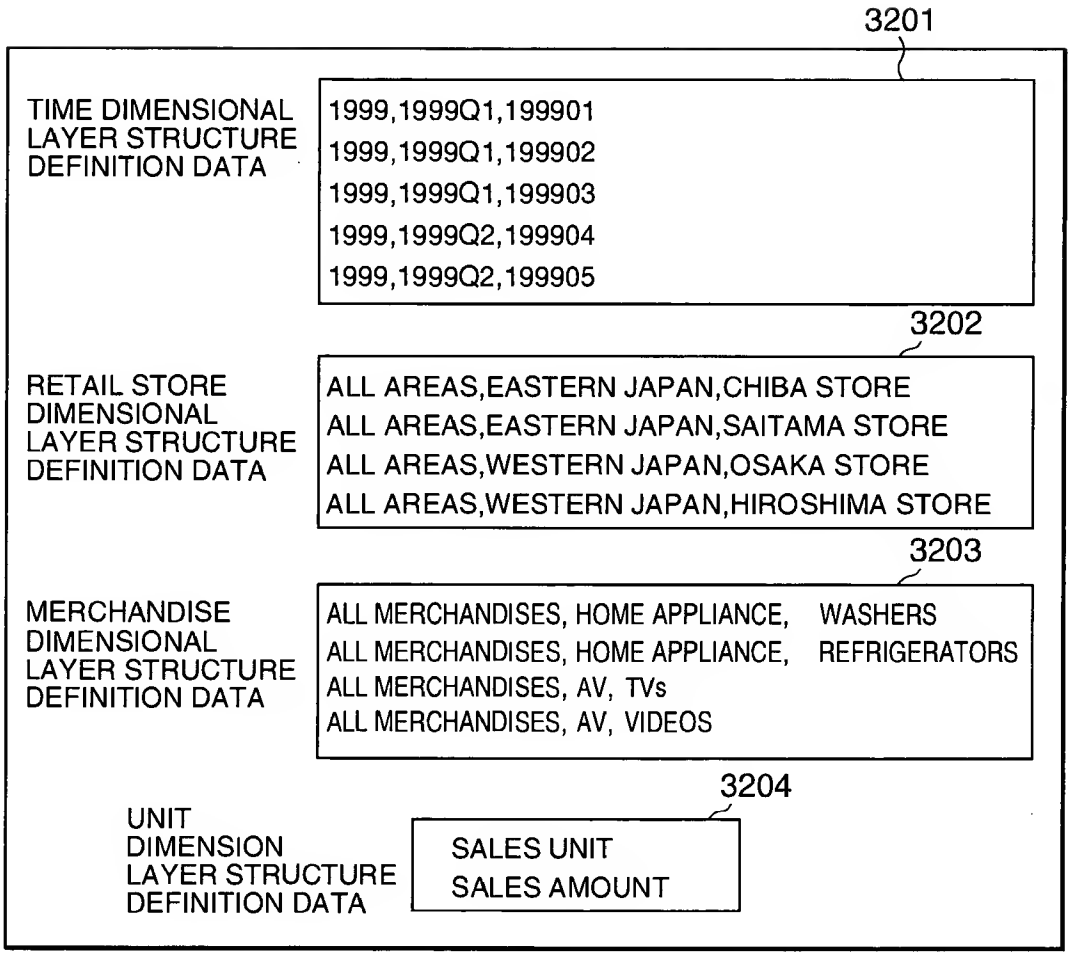

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FIG.22 PRIOR ART

3301

199901,	SAITAMA STORE,	TVs,	22,	2420000
199901,	OSAKA STORE,	REFRIGERATORS,	15,	1350000
199902,	HIROSHIMA STORE,	VIDEOS,	42,	2940000
199902,	SAITAMA STORE,	WASHERS,	21,	1680000
199903,	CHIBA STORE,	VIDEOS,	33,	2310000
199904,	HIROSHIMA STORE,	REFRIGERATORS,	18,	1620000
199905,	CHIBA STORE,	TVs,	45,	4950000
	⋮			

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FIG.23 PRIOR ART

MERCHANDISE DIMENSION	TVS
UNIT DIMENSION	SALES AMOUNT

TIME DIMENSION								
								1999
RETAIL STORE DIMENSION	199901	199902	199903	19999Q1	199904	199905	19999Q2	
CHIBA STORE	1100000	330000	770000	2200000	1100000	660000	1760000	3960000
SAITAMA STORE	990000	990000	660000	2640000	660000	990000	1650000	4290000
EASTERN JAPAN	2090000	1320000	1430000	4840000	1760000	1650000	3410000	8250000
OSAKA STORE	1100000	1100000	1100000	3300000	110000	990000	1100000	4400000
HIROSHIMA STORE	330000	550000	1100000	1980000	1100000	660000	1760000	3740000
WESTERN JAPAN	1430000	1650000	2200000	5280000	1210000	1650000	2880000	8140000
ALL AREAS	3520000	2970000	3630000	10120000	2970000	3300000	6270000	16390000

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FIG.24 PRIOR ART

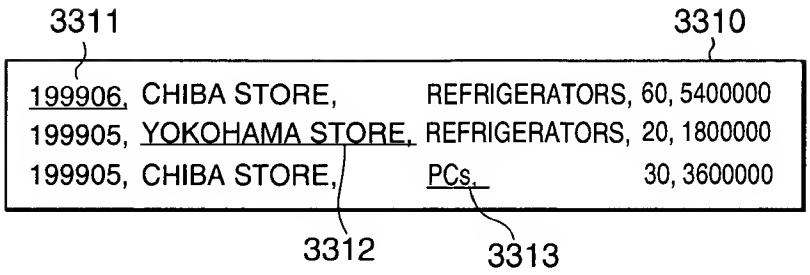

FIG.25 PRIOR ART

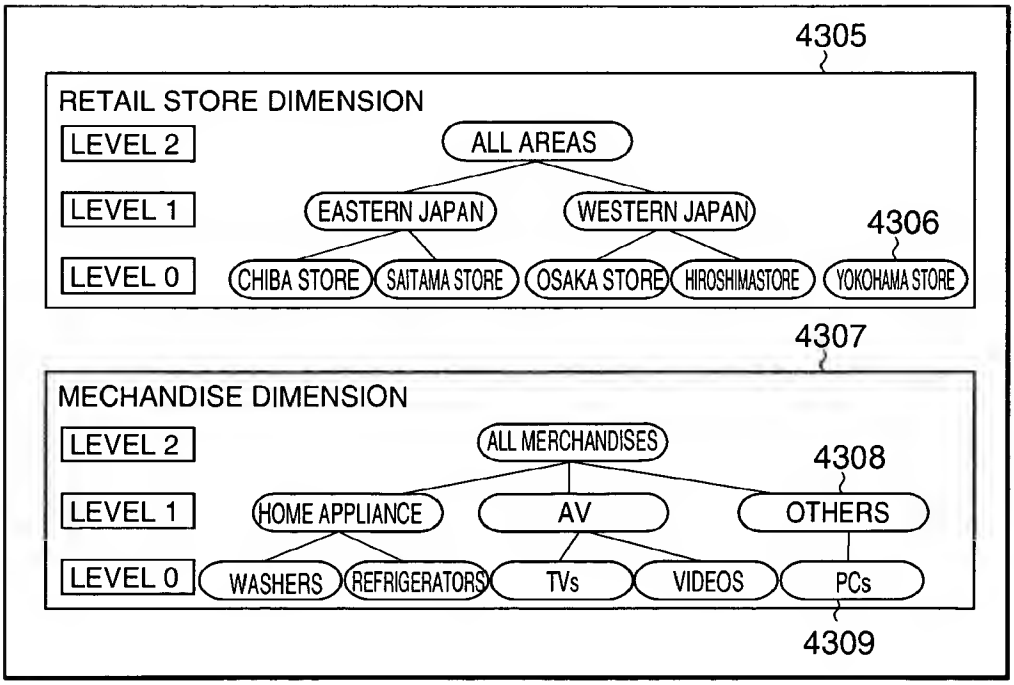

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FIG.26

RETAIL STORE DIMENSION LAYER DEFINITION DATA

```
#MAIN LAYER RULE:
#SEQUENTIALLY APPLYING SUBRULES
APPLYING SUBRULE STORE_RULE1
APPLYING SUBRULE STORE_RULE2
```
~3140

```
#SUB LAYER RULE :STORE_RULE1
#FROM CSV FILE,OBTAINING LAYER INFORMATION
FROM FILE,CSV FILE1
LEVEL 0=COLUMN 3
LEVEL 1=COLUMN 2
LEVEL 2=COLUMN 1
```
~3141

```
#SUB LAYER RULE:STORE_RULE 2:
#AFTER CHARACTER ROW CONVERSION ON RETAIL STORE, OBTAINING LAYER INFORMATION
FROM MEMBER NAME
LEVEL 0= $ MEMBER NAME
LEVEL1={
   S/＼(.JAPAN＼). $ /＼1/
}
LEVEL 2={
     ALL SALES TERRITORIES
}
```
~3142

FIG.27

3340

```
199901,  EASTERN JAPAN  SAPPORO STORE, TVS,17, 1870000
199902,  HIROSHIMA STORE, VIDEOS, 42, 2940000
199903,  EASTERN JAPAN  SAPPORO STORE, REFRIGERATOR,15,1350000
```

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FIG.28

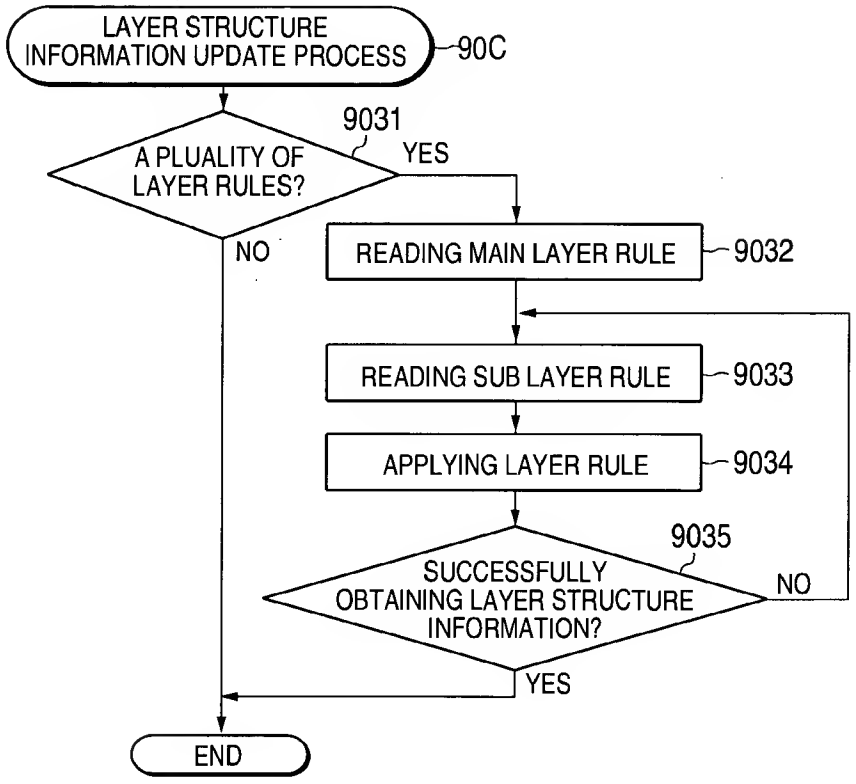
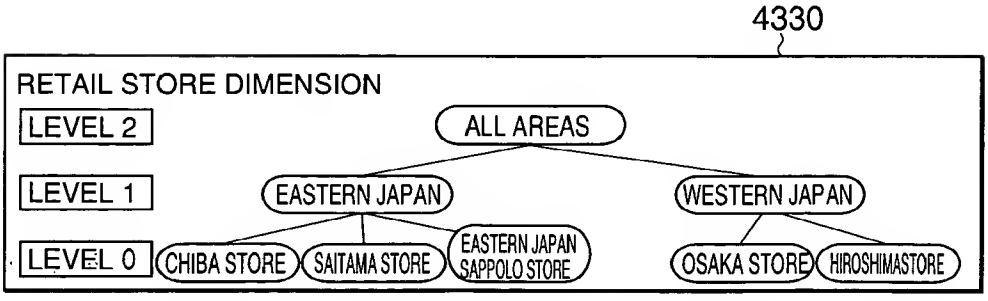
FIG.29